

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Fraser Papers Limited

Maine Manufacturing Extension Partnership

Value Stream Mapping Helps Fraser Paper Maintain their Maintenance Shop

Client Profile:

Fraser Papers is an integrated specialty paper company that produces a broad range of specialty packaging and printing papers. The Madawaska, Maine mill was constructed in 1925 and currently has 480 employees across its several plants.

Situation:

Fraser Papers understood the value of the Lean methodology and could see the benefit of doing a Value Stream Map (VSM) for the Maintenance Shop. Dan Dionne, the Maintenance Shop Supervisor, was so overwhelmed with all the backlogs, that the shop was not always able to keep up with the demands that were put on them. They also ran the risk of not having spare parts on hand in the event that they were needed thus risking the potential of increased downtime and lost revenue. Fraser Papers contacted the Maine Manufacturing Extension Partnership (Maine MEP), a NIST MEP network affiliate, for help.

Solution:

Maine MEP teamed together Fraser Papers' key maintenance shop personnel, engineers, and neighboring shop employees for a Value Stream Mapping (VSM) in the Maintenance Shop. After reviewing basic Lean manufacturing terminology, they created a current state map which revealed that the supervisory workload was not sustainable; the planning, scheduling and engineering was very ad-hoc; and the current backlog had been increasing, resulting in the depletion of spare parts in their mill store. The future state map helped develop a continuous improvement plan that would result in a reduction of backlogs by 50 percent. An improved work intake and prioritization process (engineering, planning, scheduling) of machine shop repairs would allow the supervisor to focus on efficiency gains (increase capacity) in the shop, thereby preventing the re-emergence of backlog. As a result of Maine MEP's assistance, the Fraser Papers Maintenance Shop has become more efficient by a margin of 15 to 20 percent. This is measured by the amount of work coming into the shop and the amount of repaired jobs that are returned back to the mill stores. Increasing the company's capacity to handle work in-house has meant that the amount of costly repair work previously done outside the mill has decreased by 50 percent. The maintenance shop now has the ability to work on orders that may be short notice requests or to fabricate items in advance in preparation for plant shut downs. The VSM also identified the need to hire one or two new employees. It also helped to establish a machine shop parts identification system which saves time wasted searching for parts.

Results:

- * Realized \$60,000 in cost savings.
- * Increased efficiency by 15 to 20 percent.

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- * Reduced repair work by 50 percent.
- * Reduced backlogs by 50 percent.
- * Created 2 new jobs.

Testimonial:

"The VSM process helped the Fraser Maintenance Shop identify their strengths and weaknesses. We are now better at identifying and prioritizing our backlog. Thank you to the Maine MEP team for introducing this process to us here at Fraser Papers."

Daniel Dionne, Maintenance Shop Manager